DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-018381
Date Inspected: 28-Nov-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:	Lv Li Qing			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

BAY 14, OBG 13AE I-RIB (NWIT # 7527)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

VP3008-001-002, 015, 029, 003, 016, 030, 032

This Quality Assurance (QA) Inspector observed the following work in progress:

Bay 14

SP3124 TO SP (B-WR17856)
SMAW welding of weld joints 006 located on SEG3019AY.
Welder is identified as 043661. ZPMC QC is identified as Mr. Wang Xu.
The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G(1F)-FCM-REPAIR-1.

FB 3119 TO LD 3126 (B-WR17559)
FCAW welding of weld joints 170 located on SEG3007C of segment 13AE at PP120.
Welders are identified as 215553 & 050242. ZPMC QC is identified as Mr. Zhong Yong Gang.
The welding variables recorded by QC appeared to comply with WPS-345-FCAW-3G(3F)-REPAIR-1.

LD 3025 TO FB 3106 (B-WR17544)
SMAW welding of weld joints 042 located on SEG3007P of segment 13AE at PP118.
Welder is identified as 216086. ZPMC QC is identified as Mr. Zhong Yong Gang.
The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G(3F)-FCM-REPAIR-1.

I-RIB TO I-RIB (B-WR17626)
SMAW welding of weld joints 220 located on SEG3011L of segment 13CE near PP122.5.
Welder is identified as 044772. ZPMC CWI is identified as Mr. Lv Li Qing.
The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G(3F)-REPAIR-1.

LIFT 14E
During random in process inspection this QA inspector observed that a ZPMC NDT personnel was performing Air Carbon Arc Gouging on the weld joints of Longitudinal Diaphragm (LD 3042) to Bottom Plate (BP 3082) of OBG lift 14E. Prior excavation preheating of 65°C i.e. required for critical weld was not performed by ZPMC personnel. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3091AB-091, 092, 093, 095, 096

Segment 13BE
During random in process inspection this QA inspector observed that ZPMC NDT personnel was performing Ultrasonic Testing on the weld joints of lifting lug to longitudinal diaphragm at panel point PP121.5. The members are identified as OBG Components. The weld designations reviewed are as follows. Attached photographs provide additional information.

SEG3009K-171, 173

Segment 13AE
During random in process inspection this QA inspector observed that ZPMC personnel were performing repair welding on the weld joints SEG3007G-047 & SEG3007F-038 as per welding repair report B-WR16847, Rev 0. Welds are identified as joining Floor Beam (FB3126) to bottom plate SA3012 at panel point PP119+1500. The depth of excavation was observed approx 34~37mm which was more than 65% of 45mm thickness. As per AWS D1.5, section 12; for critical weld excavated from one side more than 65% of thickness, engineer approval is required. This issue has been discussed with lead QA and ZPMC QC Mr. Zhong Yong Gang. Attached photographs provide additional information.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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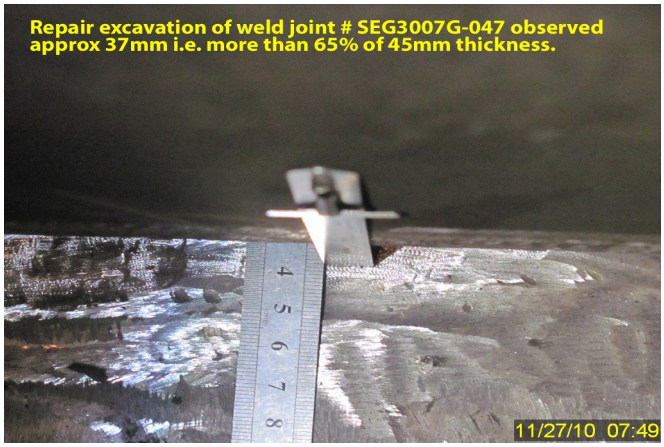

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer